WHAT IS CLAIMED IS:

1. A method for tracking allocated space in a write reservation station of a data transfer controller using a write allocation count, said method comprising the steps of:

initializing said write allocation count prior to performance of any data transfers;

incrementing said write allocation count on allocation of a block of write reservation station space at a data destination;

decrementing said write allocation count on a read from a data source;

if said write allocation count meets predetermined criteria, then reading from said data source, transferring said read data to a data destination via a data routing channel and storing said transferred data in allocated reservation station space; and

if said write allocation count does not meet said predetermined criteria, then performing no further allocations of space to said write reservations station until said write allocation count meets said predetermined criteria.

2. The method of claim 1, wherein:

said predetermined constant of said step of initializing said write allocation count equals a number of data words storable in said data routing channel.

3. The method of claim 1, wherein:

said step of incrementing said write allocation count on allocation of a block of write reservation station space

increments said write allocation counter by an amount equal to a number of data words allocated.

4. The method of claim 1, wherein:

said step of decrementing said write allocation count on a read from a data source decrements said write allocation counter by an amount equal to a number of data words read.

5. The method of claim 1, wherein:

said step of reading from said data source reads data in an amount equal to a read burst size constant related to a default read burst size of said data source.

6. The method of claim 5, wherein:

said predetermined criteria of said write allocation count includes whether said write allocation count is greater than or equal to said read burst size constant.

7. The method of claim 5, wherein:

said predetermined criteria of said write allocation count includes whether said write allocation count is greater than or equal to a number of data words storable in said data routing channel.

8. The method of claim 5, wherein:

said predetermined criteria of said write allocation count is met if

said write allocation count is greater than or equal to said read burst size constant, and

an allocation of a block of write reservation station space was made in an immediately prior cycle.

9. The method of claim 5, wherein:

said predetermined criteria of said write allocation count is met if

said write allocation count is greater than or equal to said read burst size constant, and

an allocation of a block of write reservation station space was not made in an immediately prior cycle, and

said write allocation count is greater than or equal to a number of data words storable in said data routing channel.

10. The method of claim 5, wherein:

said predetermined criteria of said write allocation count is met if

said write allocation count is not greater than or equal to said read burst size constant, and

all write reservation station space at said data destination has been allocated.

11. The method of claim 5, where:

said predetermined criteria of said write allocation count is not met if

said write allocation count is not greater than or equal to said read burst size constant, and

all write reservation station space at said data destination have not been allocated.

12. The method of claim 5, wherein:

said predetermined criteria of said write allocation count is not met if

said write allocation count is greater than or equal to said read burst size constant, and

an allocation of a block of write reservation station space was not made in an immediately prior cycle, and

said write allocation count is not greater than or equal to a number of data words storable in said data routing channel, and

all write reservation station space at said data destination have not been allocated.

13. The method of claim 1, further comprising the steps of:

reading data from said reservation station space and writing said read data to said data destination at rate determined by said data destination;

deallocating a block of write reservation space at said data destination upon reading data from said reservation station space and writing said read data to said data destination; and

said step of incrementing said write allocation count on allocation of a block of write reservation station space at said data destination occurs only if at least some write reservation station space has not been allocated.

14. The method of claim 13, wherein:

said step of reading data from said reservation station space reads data in an amount equal to a write burst size constant related to a default write burst size of said data destination; and

said step of deallocating a block of write reservation space at said data destination deallocates a block having a size equal to said write burst size constant.